



January 27, 2015

## **Ryan Inc. Central Bremo and Possum Point Ash Pond Closures Capabilities**

### **Project Background & Objective:**

Dominion Plans to close three (3) ash ponds at Bremo Power Station and five (5) ash ponds at Possum Point Power Station by summer 2018. The following are questions we would like you to submit with your qualifications package as well as prepare for a future presentation at our Innsbrook offices to discuss your capabilities.

#### **1. General Background**

- *See attached Corporate Brochure*

#### **2. Experience in similar projects/efforts**

##### **a. Installing liners**

- *We have installed over 200 acres of liner in the last 10 years for ash caps and cells for Dominion alone. We have installed that much on other Industrial Landfill projects, (Domtar, Rock Ten, AEP, Waste Management, Republic Waste and others).*

##### **b. How have you dealt with the dewatered effluent from ash?**

- *We have pumped to other ponds, outfall structures or directly to the discharge point depending on the condition of the effluent and the permit required method for dewatering. Due to the schedule of these projects and the amount of dewatering required, we are in discussions with a dewatering company that has used a portable treatment system for fly ash in the past to expedite the dewatering process.*

##### **c. Provide references**

- *Mike Lott GAI Engineering 804-221-8462*
- *Ron DiFrancesco Golder Engineering 804-358-7900*
- *Brandon Schmader – AEP Lead Coordinator  
Glen Lyn Fly Ash Pond Closure - 304-671-6129*
- *Chris Gee – Sr. Construction Engineer – Dominion Power  
804-205-0527*
- *Mark Mitchell – Vice President -Dominion Power - 804-273-4543*

3. Your approach for this effort. (This question may be deferred until after the site visit).

*After visiting the site we believe the approach for these projects would vary from pond to pond. The approach would also greatly vary depending on what Dominion decides to do with dredging ash from pond to pond prior to June 1, 2015. One of the first orders of business would be to obtain the rights to a borrow soil source and start the permitting process. Also all initial temporary erosion and sediment controlled measures that are required will be installed.*

### **Bremo Power Station**

**West Pond** - *We think the relatively small amount of ash in the West Pond, if not dredged prior to June 1, could be consolidated and capped as a small portion of the pond or it could be hauled to a Municipal waste landfill permitted to accept fly ash. Following the removal of the ash, a coffer dam, (sheet pile or inflatable ballast) would be installed around the limits of the proposed Wastewater pond. The area would be dewatered, cleaned, graded and lined. A soil berm would be added on the interior of the coffer dam to allow for a liner tie in point following removal of the coffer dam. Following the completion of the Wastewater pond, the outfall from the plant would be directed into the new lined Wastewater pond. At that point the remainder of the pond would be dewatered, cleaned, graded and lined to form a clean pond.*

**North Pond** – *We feel that ash from the upper reaches of the North Pond could be moved either by dredging and/or conventional methods to the lower portion of the pond to create a base for the subgrade of the capped area. Storm water control is going to be a critical portion of this project; therefore during this excavation operation we would install designed storm water control features around the North Pond. Following the dredging the pond would be dewatered. Due to the schedule restrictions, we have been discussing dewatering with the company that performed the dewatering at the TVA spill in Kingston, TN. They used a treatment system to expedite the dewatering operation. After dewatering we could start to lower the dam to generate soil to start the bridging of the ash and grading for drainage of the synthetic cap. Following the grading operation the liner would be installed followed by cover soil and vegetation.*

**East Pond** – *We feel ash from the east end where the existing water is standing could be moved to the west to create contours for drainage. The additional ash berms that were previously constructed could be moved to the center to create additional fill to promote drainage. The east end could be used for storm water management. Following the preparation of the subgrade, liner would be placed and cover soil and seeding would be completed.*

## ***Possum Point Power Station***

***Ash Pond “E”-*** We think it would be of great benefit to the project if Dominion could dredge as much of Pond E as possible prior to June 1<sup>st</sup>. The more of Pond E that could be clean closed would help many of the challenges of the project. The lower portion of the pond could be sectioned off with a coffer dam. The permanent Wastewater pond could be constructed. Following completion of the Wastewater pond the remainder of the pond could be dewatered. Areas with remaining ash could either be hauled away to a landfill or closed. The remainder of the area with no ash could be dried, graded, and lined to complete the clean closure area.

***Ash Pond “D”-*** The ash in pond D will need dewatered and then graded. The dams can then be cut down and additional soil brought in to grade the area to create positive drainage. Drainage channels will need to be installed as required as work progresses. Following the preparation of subgrade the liner will be installed, soil cover placed and vegetation established.

***Ash Pond “ABC”-*** These ponds are relatively dry. Storm water management features will be installed. The existing area will be cleared and graded to create positive drainage. Due to the height of the perimeter berm relative to the ash we feel the existing berm elevation will need to be maintained, eliminating any possible soil availability. Once the area is graded to drain, liner will be installed and soil and vegetation placed. Due to the proximity of the river we feel an area may need to be cleaned of ash and used as a storm water management pond.

## **4. Potential challenges**

- *Schedule - It will be imperative to complete drawings for permit submission as soon as possible. It will also be important to try and prioritize permits to possibly begin some portions of the project prior to receipt of all the permits.*
- *Storm water management. This will be extremely important due to the proximity to water ways. We feel portions of current ponds may need to be used as storm water control ponds and then decommissioned and converted following vegetation.*
- *Timely dewatering. It will be necessary to have alternative means of dewatering in lieu of waiting for solids to settle out of the contact water.*
- *Availability and access for the large amount of import soil that will be necessary to complete these projects.*
- *Due to the new EPA regulation most if not all power companies will be trying to close ash ponds at the same time. Synthetic liner manufacturing will need to increase to meet the demands. It will be imperative to order synthetic materials as early as possible.*

5. Project Management Approach/Structure

- *We anticipate having a Project Manager in charge of the entire project along with a superintendent for each of the ponds. We would also have a surveyor on site for layout, quantity survey and as built drawings. Due to the schedule we would treat each pond as a separate project with its own supervision and equipment. We would have a full time Safety professional and a clerk to manage onsite documentation requirements such as safety, environmental, and commercial. We would also have a Contractor Administrator for the project to handle submittals as well as the commercial aspects of the project. This is the same management approach we are using at the Virginia City Ash Disposal Project.*

6. Future resources to handle our project – what is your current and future workload?

- *The vast majority of our work is for a duration of one year or less, so we begin each year with a significant amount of capacity and would have no trouble taking on the volume of work contemplated by these projects. Our current annual capacity is approximately \$150 million of contract work, although it can be significantly higher depending on the percentage of subcontracted versus self-performed work. As of today we have \$30 million under contract to be performed in 2015, approximately \$30 million in 2016 and \$5million in 2017.*

7. Types of equipment? (owned vs. rented)

*See attached corporate brochure for current fleet of owned equipment. If necessary we have vendor agreements which give us the ability to rent any additional equipment required to complete the projects.*

8. Typical problems experienced on these types of jobs?

- *Having necessary permits in a timely manner.*
- *Delays in decisions when changed conditions arise.*
- *Availability of sufficient materials to meet production.*
- *Weather can be a factor, depending on the time of year.*

9. What should we ensure that the engineering supplier delivers?

- *Timely permits*
- *Quick turnaround time on submittals and RFI's.*

- *Timely updates of plan revisions*
- *We have worked extensively with both GAI and Golder and have developed very good working relations with both. We are confident we would work well together to make sure that project milestones are met.*

10. Is there a closure site under active construction you are implementing that we can visit?

*-We just completed a closure for AEP in Glen Lyn VA and are in current negotiations to close another this year. We can give you contact information or set up a site visit if necessary.*

11. Who are your typical subs?

*It varies job to job but we typically use:*

- *West Land Clearing for clearing work*
- *Chesapeake Containment Systems for liner work*
- *ECS for silt fence and E&S features*
- *We are in discussions with a dewatering contractor and a dredging contractor, both of whom have a great deal of experience with ash as well as experience with Dominion.*

12. What do you self-perform?

*-We self-perform all excavation work, the majority of the pipe work and storm water control work.*

13. Will you be able to support a spring 2015 bid cycle?

a. Prebid march timeframe?

- *Yes we can support that bid cycle.*

14. If Dominion provides a 30% engineering package can you, utilizing a Unit price approach, develop a project cost estimate?

a. What has been your accuracy with estimate development on past projects?

*-Yes we can supply a Unit price estimate using 30% plans. Our history of accuracy has been very good based on scopes of works staying relatively similar. The majority of our work is private and in many instances we work with owners to develop budgetary estimates for projects. We have had success presenting value engineering or cost saving ideas when involved in the design process in the early stages.*